



UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Communications
and Information
Washington, D.C. 20230

February 21, 1997

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The Honorable Reed Hundt
Chairman
Federal Communications Commission
1919 M Street, NW
Washington, D.C. 20554

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Federal Communications Commission
Office of Secretary

Re: Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Sixth Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 11 FCC Rcd 10968 (Rel. Aug. 14, 1996)

Dear Chairman Hundt:

I am writing as the Assistant Secretary of Commerce for Communications and Information and the Administrator of the National Telecommunications and Information Administration (NTIA). NTIA, part of the Department of Commerce, is the principal adviser to the President on telecommunications and information policy issues, and I am pleased to provide our views in the above-captioned proceeding.

Digital television (DTV) promises enormous benefits for all Americans, and NTIA believes the transition to DTV should be completed expeditiously.^{1/} DTV will offer greatly improved and more flexible television service and can be expected to spur the American economy. At the same time, DTV will also make the Nation's broadcast system more spectrum efficient -- it will permit broadcast channels to be placed more closely together than is presently possible, allowing much needed radio spectrum to be reallocated for other important uses.

Achieving these benefits, however, will require careful balancing of complex and in some cases competing interests. Because DTV cannot be received by currently-used television receivers, simply turning off current analog signals and turning on digital signals would disenfranchise the Nation's millions of television viewers. To preserve viewers' access to free broadcast television, broadcasters therefore must be able to use two channels to provide both analog and digital signals during a transition period. In addition, the transition

^{1/} The Administration supports a transition to digital television by 2006, as a quick transition will allow for more expedient recovery of this spectrum. See Comments of NTIA (Jul. 11, 1996, Aug. 9, 1996, and Dec. 6, 1996) in Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Fifth Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 11 FCC Rcd 6235 (Rel. May 20, 1996); and Testimony of Larry Irving, Assistant Secretary of Commerce for Communications and Information and Administrator, NTIA, on Spectrum Policy and the Budget, Senate Budget Committee (Mar. 14, 1996).

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will also require acceptance and investment in new technology by all parts of the broadcast market -- from consumers to broadcasters.

The challenge then has been to transition to DTV broadcast service in such a way as to protect viewer access to existing broadcast services, enhance spectrum efficiency by reclaiming unused spectrum for other uses as quickly as possible, and minimize to the extent possible the significant costs such a transition will require. The Commission has made great strides toward filling this tall order. We believe, however, that the Commission can take a number of additional steps to do more on all three counts. Specifically, the Commission should maximize spectrum recovery in individual markets; accommodate public safety needs; and seek to address better the concerns of noncommercial, low-power television, television translator, UHF, and small and rural broadcasters, as described further below.

As the Commission moves forward in the implementation of a regulatory framework for DTV, NTIA also believes it is important to consider DTV broadcasters' public interest obligations. As you know, on February 5, 1997, Vice President Gore announced that President Clinton would convene a group of experts to study and recommend to the President within one year what the nature of the public interest obligations of digital broadcasters should be.^{2/} We look forward, as we know you do, to the work of that group, which we hope will provide guidance as to how the new services might help fulfill broadcasters' public interest obligations in the digital era in a clear, meaningful, and measurable way.

The Commission's Approach Would Largely Protect Viewers' Access to Free Broadcast Television and Enhance Spectrum Efficiency.

Protecting Viewers' Access to Free Broadcast Television

NTIA supports the Commission's proposed "core spectrum" approach to DTV allotments because, for the most part, it appropriately balances two important principles: protecting viewers' access to broadcasting services, and promoting efficient use and expedient recovery of spectrum. Free broadcast television remains fundamentally important to the Nation's viewers. Unlike cable television and other subscription media, broadcast television is available to virtually the entire U.S. population, has no monthly fee, and requires no special equipment beyond a standard television set and antenna.^{3/} Moreover, broadcast licensees are required by the Commission to serve the interests and needs of their communities through locally originated news and programming.^{4/} This system of free, locally-based broadcast television has served the United States well for half a century.

^{2/} Statement of the Vice President on Public Interest Obligations in a Digital Age, The White House Office of the Vice President (Feb. 5, 1997).

^{3/} See Testimony, supra. n. 1, at 3.

^{4/} See 47 U.S.C. § 303(f).

Maintaining the localism, universal service, and diversity of this system as television advances into the next generation is in the public interest. The Commission's proposals go far in achieving this important goal. Its approach allows broadcasters, including all eligible current broadcasters, to receive a DTV allotment and would not decrease existing service areas.^{5/} This will help maintain viewers' access to broadcast services on which they have come to depend.

Efficient Use and Expedient Recovery of Spectrum

Similarly, using spectrum efficiently and recovering spectrum expediently are important policy goals that must be enhanced by any DTV allotment plan. The demand for spectrum will continue to soar in the coming years as wireless services become more ubiquitous.^{6/} Wireless applications, including land mobile applications, personal communications services, wireless data systems, telemedicine and biomedical services, and wireless portions of the local telephone loop, will continue to multiply at a rapid pace.^{7/} NTIA commends the Commission for its core spectrum approach because it reduces the amount of spectrum allocated for television broadcasting while maintaining the same number of licensees and services available to the public.^{8/} The core spectrum approach "repacks" the spectrum in a way that increases the amount of spectrum available for other wireless services after the transition.^{9/} In addition, it would allow a significant amount of valuable spectrum in channels 60 to 69 to be recovered rapidly and made available for auction almost immediately.^{10/}

^{5/} Notice at paras. 10, 13. Under this approach, 90 percent of broadcasters need not move channels more than once, helping to maintain a stable environment for viewers and keeping broadcasters' costs down. Notice at paras. 24-25.

^{6/} See Testimony, supra n. 1, at 10-11.

^{7/} Id.

^{8/} Because the core spectrum approach best balances these competing concerns, we support this approach over the alternative proposed by the Association for Maximum Service Television, Inc. See Notice at paras. 28-34.

^{9/} Repacking the spectrum in this way maximizes both the amount of spectrum available for auctioning and the value of the frequencies made available. It may make possible the creation of nationwide contiguous spectrum blocks, permitting the development of a variety of regional and nationwide radio-based services. Id. at 11-12. As noted above, the Commission's approach would also achieve this goal with minimum disruption to broadcasters; the vast majority of broadcasters would have to move to a new channel only once. Supra n. 4.

^{10/} Notice at para. 25.

The Commission Should Take Additional Steps to Address Spectrum Efficiency and Public Safety.

Maximizing Spectrum Recovery in Individual Markets

To further ensure spectrum efficiency, NTIA also recommends that the Commission revisit periodically its allocation decisions to ensure that the appropriate amount spectrum has been allocated for DTV broadcast services and to make adjustments to the Table of Allotments as necessary. The Commission noted that "most" communities would use all spectrum allotted for DTV for full-power broadcasting, but that some vacant spectrum would be available during and after the transition in some areas.^{11/} Our review of the allotment plan suggests that the allotments are based on the amount of spectrum needed in the densest groupings of major urban centers in the United States, that is, in areas such as New York, Boston, and Philadelphia.^{12/} Other areas, such as Detroit or Dallas/Fort Worth, may not require as much spectrum for DTV yet may have significant demand for other spectrum-based services. The number of areas with vacant channels may therefore be more significant than the Commission anticipates and may even include a number of top-ten television markets. It is therefore particularly important for the Commission to explore other potential uses for this spectrum and to revise its allocation decisions when appropriate. In doing so, the Commission must balance the need to allow for continued growth of broadcasting services against the need to make spectrum available for other services.^{13/} While the Commission has suggested that this vacant spectrum be used for other purposes,^{14/} the balancing necessary to accommodate these competing needs raises sufficiently complex questions that NTIA suggests they be addressed in a separate rulemaking so that the implementation of DTV allotments is not delayed.

^{11/} Notice at paras. 50-53. The Commission cites Bangor/Orono, Maine as an example of a community that might have excess spectrum.

^{12/} The Commission concluded that 44 channels are needed to allow existing eligible broadcasters to maintain broadcasting services. Notice at para. 21. This number of channels appears to be based on the fact that New York, the area requiring the largest number of channels, has 22 current allotments and needs an additional 22 channels to deal with co-channel and adjacent channel interference from nearby areas such as Boston and Philadelphia. Many areas are significantly less dense, however, and will not necessarily use all 44 channels.

^{13/} This is particularly important because it is not clear how the DTV market will develop. It is unknown at this time what the demand for television broadcast service will be after the transition. DTV permits transmission of multiple standard definition television (SDTV) channels over a single 6 megahertz allotment. If the market develops so that SDTV (rather than high definition television) predominates, the result may be less demand for additional broadcast channels in some markets.

^{14/} Id.

Accommodating Public Safety

NTIA urges the Commission to ensure that its allotment plan accommodates public safety needs. The Commission proposes to allow some interim NTSC broadcast operations on channels 52 to 69.^{15/} After the Commission issued its Notice, the Public Safety Wireless Advisory Committee (PSWAC), a joint Federal, State, and local organization established by NTIA and the Commission,^{16/} recommended that a portion of the spectrum between channels 60 to 69 be allocated for public safety uses.^{17/} This would allow for expansion of current voice systems in high-density areas and further allow for the implementation of advanced wireless communications applications such as video and imaging services for mug shots and fingerprints. We believe that public safety needs can be accommodated while maintaining existing broadcast stations on these channels and also reallocating and auctioning appropriate spectrum between these channels to fund the Administration's initiative to improve school construction.^{18/}

The Commission Should Take Additional Steps to Protect and Expand Viewers' Access to Broadcast Services.

In a process as complex as this, it is inevitable that the Table and transition to DTV will affect some broadcasters more adversely than others. In particular, noncommercial stations, low-power television and television translator stations and small and rural broadcasters may find adjusting to the planned changes particularly difficult. These broadcasters provide important services to the public, and we urge the Commission to consider additional steps it can take to minimize the potentially disruptive aspects of the transition to DTV for the Nation's viewers, as described more fully below.

Noncommercial Broadcasting Services

With respect to noncommercial broadcasters, the Commission proposes to eliminate all vacant NTSC reservations but asks whether vacant noncommercial broadcast reservations should be treated differently.^{19/} Historically, Congress and the Commission have accorded

^{15/} Notice at para. 21.

^{16/} Final Report of the Public Safety Wireless Advisory Committee to the Federal Communications Commission and the National Telecommunications and Information Administration (Sept. 1996) at 21.

^{17/} PSWAC Final Report at 21.

^{18/} See Remarks on the School Reconstruction Initiative, 32 Weekly Comp. Pres. Doc. 1236-37 (July 11, 1996).

^{19/} The Commission's Table suggests that 326 replacement vacant, noncommercial DTV reservations can be provided immediately and that 186 of these reservations would be on channels 60 to 69. See Notice at paras. 58-59. At the same time, however, the Commission must ensure that the President's school

noncommercial broadcasting special treatment because it plays a unique and critical role in providing educational and other quality programming and often lacks the financial resources possessed by commercial broadcasters.^{20/} Such treatment for noncommercial broadcasting remains essential if the American public is to continue to reap the benefits public television can offer.

In comments filed in this proceeding, America's Public Television Stations and the Public Broadcasting Service (jointly, PTV) ask the Commission not to delete vacant reserved channels without first performing a channel-by-channel engineering analysis to determine whether there is any practicable way to accommodate all eligible broadcasters or to alleviate overcrowding in the broadcast spectrum.^{21/} If the Commission concludes that it cannot adhere to its longstanding policy of protecting reserved noncommercial spectrum without delaying the DTV allotment process, NTIA recommends that the Commission take three ameliorative steps, to the extent that it is possible to do so without delaying the implementation of DTV. These steps would seek to preserve the amount of broadcast spectrum allocated for noncommercial use.

First, NTIA recommends that, in handling construction applications for noncommercial stations on channels proposed for elimination, the Commission should, to the extent possible, replace the deleted channel with a replacement NTSC allotment, preferably within the core.^{22/} Second, even if the Commission concludes that wholesale deletion of vacant noncommercial reservations is necessary, this may not be the case in rural areas with less spectrum congestion. Thus, NTIA recommends that after the Commission adopts its Table it should review its resulting allotments to determine if reinstatement of any vacant noncommercial NTSC reservations is practical.^{23/} Finally, although the Commission may

reconstruction initiative and public safety needs for spectrum between Channels 60 to 69 are not compromised. See n. 20 supra.

^{20/} See Joint Comments of America's Public Television Stations and the Public Broadcasting Service (PTV) at 20-21 (citing Deletion of Noncommercial Reservation of Channel #16, 482-488 MHz, Pittsburgh, Penn., 1996 FCC LEXIS 4078 (July 24, 1996), at para. 18., which affirmed the long-standing, important public policy of maintaining structural integrity of reserved noncommercial spectrum). These comments and all others hereinafter were filed in Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Sixth Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 11 FCC Rcd 10968 (Rel. Aug. 14, 1996).

^{21/} Comments of PTV at 21.

^{22/} NTIA especially urges the Commission to make such allotments when an applicant would become the first provider of service in a market. See Comments of PTV at 22. This would benefit viewers, particularly those not currently able to receive noncommercial programming.

^{23/} In keeping with its principles, the Commission should refrain from deleting vacant NTSC noncommercial reservations in such rural areas to the extent that doing so would not (1) reduce the expected DTV service area, (2) result in increased interference to existing stations, or (3) require the

not be able to accommodate all vacant noncommercial NTSC reservations during the transition to DTV, all deleted, unreplaced reservations should be restored at the end of the transition period (and designated as noncommercial) in an amount equal to their current number of vacant reservations.^{24/} Thus, these reservations could either permit extension of noncommercial broadcasting service or be offered at auction.^{25/}

Low-power Television and Television Translator Services

The Commission should also investigate whether preserving low-power television and television translator services to a greater extent is possible.^{26/} These stations provide programming to many underserved segments of the American public, such as rural and non-English speaking populations. In addition, a significant number of low-power station licensees and permittees are minorities.^{27/} As minority broadcasters are underrepresented in the broadcasting field and currently own only three percent of all operating television stations,^{28/} continued ownership of broadcasting facilities by minorities is a policy goal that the Commission should seek to promote. Preserving these services would serve the public interest by ultimately promoting diversity. We support the steps the Commission proposes that seek to minimize displacement of these services,^{29/} and we urge the Commission to

use of more channels than the Commission has provided for in its core spectrum plan.

^{24/} In addition, we believe the Commission could allow both noncommercial and commercial broadcasters with DTV assignments outside the core to delay building DTV systems until they can operate on a DTV channel within the core, allowing them additional time to raise needed funds. This would not significantly impact the quick implementation of DTV because of the small percentage of viewers affected. Cf. Notice at para. 37.

^{25/} There has been discussion of using proceeds from such an auction to create a trust fund for public broadcasting. This approach would free public broadcasting from its dependence on the vicissitudes of the annual appropriations process.

^{26/} Many low-power television and television translator stations will be displaced by the Commission's approach. The Commission estimates that 55-65 percent of existing LPTV operations and 80-90 percent of translators could continue to operate if the proposed Table were adopted. Notice at para. 66.

When addressing means of preserving low-power and translator stations, the Commission must ensure that (1) implementation of the Table of Allotments is not delayed, and (2) public safety and spectrum auction priorities in channels 60 to 69 are maintained, as discussed supra, at 4-5.

^{27/} Report on Minority LPTV Broadcasters in the United States, Abacus Communications Company, Washington, D.C. (Jan. 1996).

^{28/} Minority Commercial Broadcast Ownership in the United States, NTIA Minority Telecommunications Development Program, U.S. Dep't of Commerce (Apr. 1996), at 2.

^{29/} Notice at paras. 67-71.

consider suggestions made by the Community Broadcasting Association (CBA) and others that would achieve this result without delaying implementation of DTV.

More specifically, the Commission should consider carefully the CBA's proposed modifications to the Commission's technical rules, which may allow for better accommodation of these stations.^{30/} While we reiterate that the Commission should not delay implementation of its Table, if time permits it should consider eliminating or modifying those rules to allow more low-power and translator stations to continue operating during the transition period and preserve viewer access to more broadcasting services without impairing the ability of full service broadcasters to serve their licensed communities. In addition, the Commission should explore other options that will help preserve these stations, including the extent to which multiple low-power stations might transmit their programming over one DTV channel.

Furthermore, as the Commission's data on low-power and translator stations appears to be out-of-date, it may be the case that low power stations can be accommodated more easily than anticipated.^{31/} As the Commission revises its proposed Table in accordance with comments received during this proceeding, it should concurrently update its database on these stations so that it has a full understanding of the Table's impact on these stations. Once the Commission has a more current database, it may be able to find engineering solutions to proposed displacements in many cases without delaying implementation of DTV.

To Further Minimize Disruption and Unnecessary Expense and Enhance Broadcasting Service, the Commission Should Allow Broadcasters Flexibility in Implementing DTV.

The Commission wisely recognizes that permitting broadcasters flexibility in implementing DTV can further the public interest. NTIA agrees and specifically urges the Commission to: (1) allow broadcasters flexibility to negotiate with others to help blunt the potentially disruptive effects of the transition to DTV; (2) afford broadcasters greater flexibility to replicate and increase their station coverage areas; and (3) accommodate the special needs of broadcasters in small and rural markets.

^{30/} NTIA endorses CBA's proposals that would allow LPTV and translator stations to accept interference to their reception areas, including UHF taboo as well as predicted and actual interference, without having to prove that viewers can receive their signal free of interference. We also support CBA's proposals that would allow LPTV and translator stations to use terrain-dependent propagation models, which are much more reliable than the Commission's fixed mileage separation rules, for estimating the potential for actual interference to broadcasters. See Comments of CBA at 18.

^{31/} The Commission's rules do not require that the Commission be notified when such a station ceases operations, and there is a discrepancy between the number of such stations on record at the Commission and for example, the number of stations the CBA believes are operating.

Negotiated Adjustments to the Table of Allotments and Transmitter Co-Siting

We agree with the Commission that flexibility to accommodate different arrangements developed through negotiations among broadcasters and other means should be an integral part of the DTV allotment and assignment process. Such mechanisms will help allow broadcasters to manage better the disruptive effects that the transition to DTV may have and expedite the transition to DTV.

NTIA therefore supports the Commission's proposals to authorize DTV and NTSC licensees to negotiate, for compensation and before conclusion of the transition period, technical specifications, including power and interference levels as well as allotment and assignment pairings that differ from the Commission's DTV table.^{32/} NTIA also supports the Commission's proposed definition of "affected broadcasters" and its proposal to include all such broadcasters in negotiations before resulting agreements can take effect. Similarly, industry assignment coordinating committees could assist the Commission in resolving disputes among broadcasters after the Table has been adopted and will help speed the transition to DTV.^{33/} As the Commission recognizes, such committees can efficiently and effectively resolve disputes without expending Commission resources.^{34/} To safeguard against inadequate consideration of the positions of all potentially affected broadcasters, we urge that the decisions of these committees be treated as advisory and that the Commission provide potentially affected broadcasters the opportunity to present their arguments to the Commission for final disposition.

NTIA also supports the Commission's proposal to offer broadcasters flexibility under its rules to locate their DTV transmitters at common sites.^{35/} In some cases, broadcasters may realize it is in their best interests to co-locate facilities, yet NTIA believes that it may be necessary in some instances for the Commission to provide incentives to broadcasters to encourage them to co-locate.^{36/} We believe that additional spectrum efficiency, reduced transmitting costs, and improved service to viewers may be possible through more extensive

^{32/} See Notice at paras. 40-41. With regard to negotiated changes to frequency pairings, the Commission notes that "individual market circumstances might lead broadcasters to seek different allotment and assignment pairings based on considerations other than service replication." See *id.* at para. 46. With regard to service area replication, NTIA advises the Commission that it should also consider whether viewers will be harmed if broadcasters are allowed to contract away excessive amounts of their licensed coverage areas.

^{33/} See Notice at paras. 100-101.

^{34/} *Id.*

^{35/} Notice at paras. 48, 56.

^{36/} Another desirable outcome of collocation is that it could facilitate an even tighter repacking of DTV allotments. Fearing additional competition within their markets from such repacking, broadcasters may have incentives not to collocate.

use of transmitter co-siting and the possible development of broadband antennas that can transmit contiguous channels via a single antenna. Since co-siting would make restrictions on broadcasting adjacent channels unnecessary, viewers would be able to receive adjacent television channels without interference and perhaps more over-the-air channels could be accommodated. In addition, co-siting may permit broadcasters to exploit economies of scale and scope by sharing facilities such as antennas, towers, and transmitters.^{37/}

Promoting Parity Between UHF/VHF Stations

NTIA also supports the Commission's proposal that would allow DTV broadcasters to replicate their existing NTSC service areas and to allow increases in UHF stations' service areas comparable with VHF stations in the same market where to do so would not cause interference to another operating or authorized television station.^{38/} This approach will protect viewers' abilities to access stations currently available to them -- an important priority. Moreover, this approach will allow UHF broadcasters to maximize their service areas, thereby strengthening competition in a market. As the Commission points out, it could also encourage those broadcasters to implement DTV service more quickly.^{39/} Finally, it makes no sense for the Commission's rules to perpetuate disparities in service areas that are based on technical limitations of the previous transmission standard and which may work to hinder competition.^{40/}

Accommodating Broadcasters' Needs in Small and Rural Markets

We also support additional efforts to accommodate the particular needs of broadcasters in small and rural markets. These broadcasters may have difficulty meeting all requirements of the transition on time due to financial constraints and different market demands for DTV service. These stations perform valuable public services, however, and the Commission should accommodate their concerns to the extent possible, as this may be necessary to preserve the viability of these stations. As we indicated in Congressional testimony, the Administration is committed to finding ways to ease the transition to digital

^{37/} Current technology suggests that it may be possible in the future to combine all digital signals from all broadcasters within a community so that they can be transmitted via a single antenna. It is too early, however, for NTIA to speculate whether or when this mode of operation will occur since this will likely depend on cost and technical factors that are still undefined.

^{38/} Notice at para. 13. See also Comments of PTV at 8.

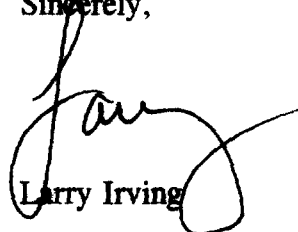
^{39/} Notice at para. 14.

^{40/} The Commission would need to review the impact of adopting this proposal on other Commission proceedings dealing with policies regarding attribution of ownership in UHF stations and local and national broadcast ownership rules. See Review of the Commission's Regulations Governing Television Broadcasting, Second Further Notice of Proposed Rulemaking, MM Docket No. 91--221, FCC 96-438 (Rel. Nov. 7, 1996); Broadcast Television National Ownership Rules, Notice of Proposed Rulemaking, MM Docket No. 96-222, FCC 96-437, (Rel. Nov. 7, 1996).

television for those broadcasters and is willing to work with legislators and regulators to develop suitable proposals, including lengthening the transition period for broadcasters in small and rural markets.^{41/} Making accommodations such as this for broadcasters in small and rural markets should not prolong significantly the timely, nationwide "roll-out" of DTV because of the small percentage of viewers affected.

NTIA seeks to emphasize again the importance of ensuring a smooth transition of our national broadcasting system from one based on analog transmission technology to one that uses digital technology. Careful balancing of several critical goals -- protecting viewers' access to free broadcast television services, enhancing spectrum efficiency, and minimizing the significant costs of the transition -- is clearly necessary. To help achieve this end, NTIA appreciates your consideration of the views expressed in this letter.

Sincerely,



Larry Irving

cc: Commissioner James H. Quello
Commissioner Rachelle B. Chong
Commissioner Susan Ness

^{41/} Testimony at 15.

Certificate of Service

I, Scott Oslick, do hereby certify that I have this 21st day of February, 1997, delivered copies of the foregoing letter, via hand delivery (*) to the following:

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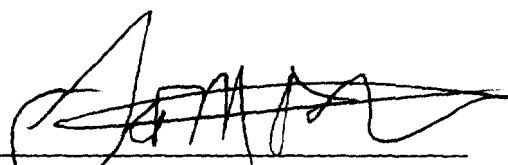
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